DETAILED ACTION

The Amendment filed 7/21/2008 has been received, entered into the record, and carefully considered. The following information provided in the amendment affects the instant application by:

Claims 65, 81, 88, and 89 have been amended. It is noted that claim 89 fails to have the status identifier "currently amended" as required and applicants are encouraged to ensure all identifiers are set forth for he claims.

Claims 90-91 have been added

Claims 1-54, and 70 have been canceled.

Remarks drawn to rejections of Office Action mailed 4/3/08 include:

102 rejections: which have been overcome by applicant's amendments and have been withdrawn.

An action on the merits of claims 55-69 and 71-91 is contained herein below. The text of those sections of Title 35, US Code which are not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

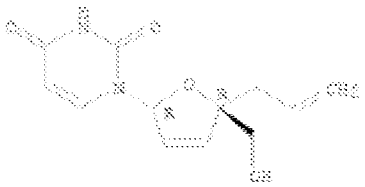
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 55-56 and 88 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 05230058.

The '058 document discloses a compound having registry number 153298-99-8 which is represented by the following structure:



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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 71-72 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 05230058 as set forth above.

The claims of the instant application are drawn to compositions comprising compounds having the structure as set forth in the claim.

The '058 document discloses compounds which anticipate the compounds instantly claimed as set forth supra. What is not disclosed is a composition comprising the same. However, a composition (composition plus carrier) is allowable only if no utility is disclosed for the old compound. See ***Ex parte Erdmann, 194 USPQ 96.*** In the instant case, the art teaches that the compounds have antiviral and antitumor. It is obvious to add a carrier to an obvious compound. See ***Ex parte Douros, 163 USPQ 667 (PTO Bd. App. 1968).***

Claim 91 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haraguchi et al. ("Allylic Substitution of 3',4'-Unsaturated Nucleosides", Journal of Organic Chemistry, 1996, vol. 61, pp. 851-858) – of record.

Claim 91 is drawn to a composition comprising the compound as set forth in the claim.

Haraguchi et al. disclose a species which anticipates the instant genus, specifically compound 26 on page 854 wherein the instant variables are: B is cytosine with R1 is acyl group; R is H; R2 is an acyl group; R3 is $CH_2CH=CH_2$ (Y is H, n is 1) and R^{3a} and R^{3b} are H.

What is not disclosed is a composition comprising the same. However, a composition (composition plus carrier) is allowable only if no utility is disclosed for the old compound. See ***Ex parte Erdmann, 194 USPQ 96.*** In the instant case, the art teaches that the compounds are effective in treating HIV (see page 855 under "conclusion") thus providing guidance for compositions. It is obvious to add a carrier to an obvious compound. See ***Ex parte Douros, 163 USPQ 667 (PTO Bd. App. 1968).***

Allowable Subject Matter

Claim 90 is allowed.

The prior art is not seen to teach or fairly suggest the compounds of claim 90, specifically cytosine analogs having a double bond in the 2'-3' position of the sugar, and are 4'-substituted by the variables as defined by R^3 where n is 3, 4, or 5.

Claims 57-69 and 73-87 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art is also not seen to teach or fairly suggest the compounds of claims 57-60 where R is any of the claimed alkyl or halogen groups. The prior art is also not seen to teach or fairly suggest the compounds of claims 61-69, those having a double bond in the 2'-3' position of the sugar and the 4'-triple bong group or the cytosine derivatives as set forth in the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRAVISS C. MCINTOSH III whose telephone number is (571)272-0657. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Traviss C McIntosh III/
Art Unit 1623
October 24, 2008